GEOLOGI REKAYASA

PERTEMUAN I
PENDAHULUAN

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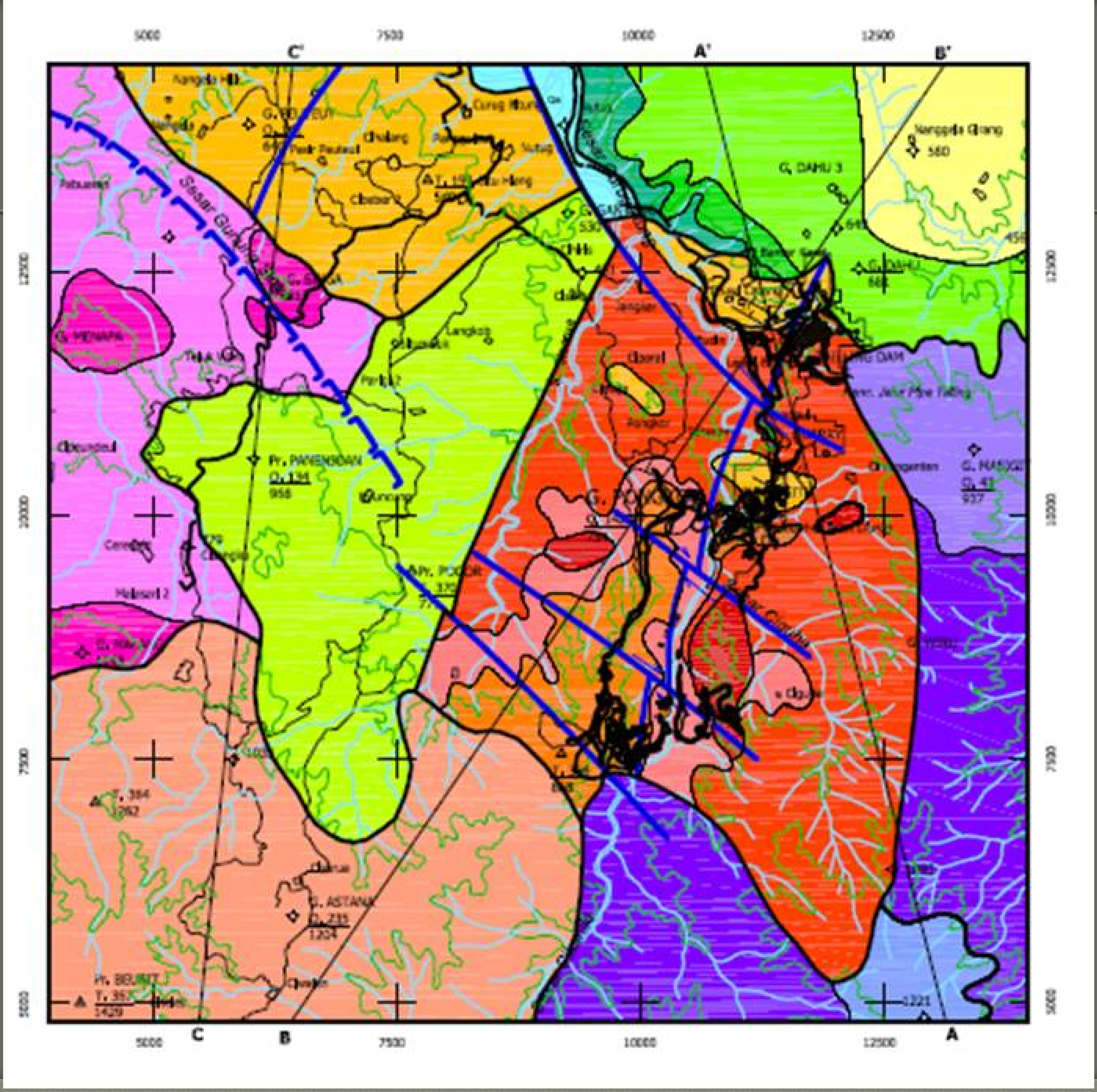
The Vajont dam during impounding of the reservoir. In the middle distance, in the centre of the picture, is Mount Toc with the unstable slope visible as a white scar on the mountain side above the waterline.

During the filling of the Vajont reservoir the toe of the slope on Mount Toc
was submerged and this precipitated a slide. The mound of debris from the slide is visiblein the central part of the photograph. The very rapid descent of the slide material
displaced the water in the reservoir causing a 100 m high wave to overtop the dam wall.
The dam itself, visible in the foreground, was largely undamaged.

The town of Longarone, located downstream of the Vajont dam, before the Mount Toc failure in October 1963.

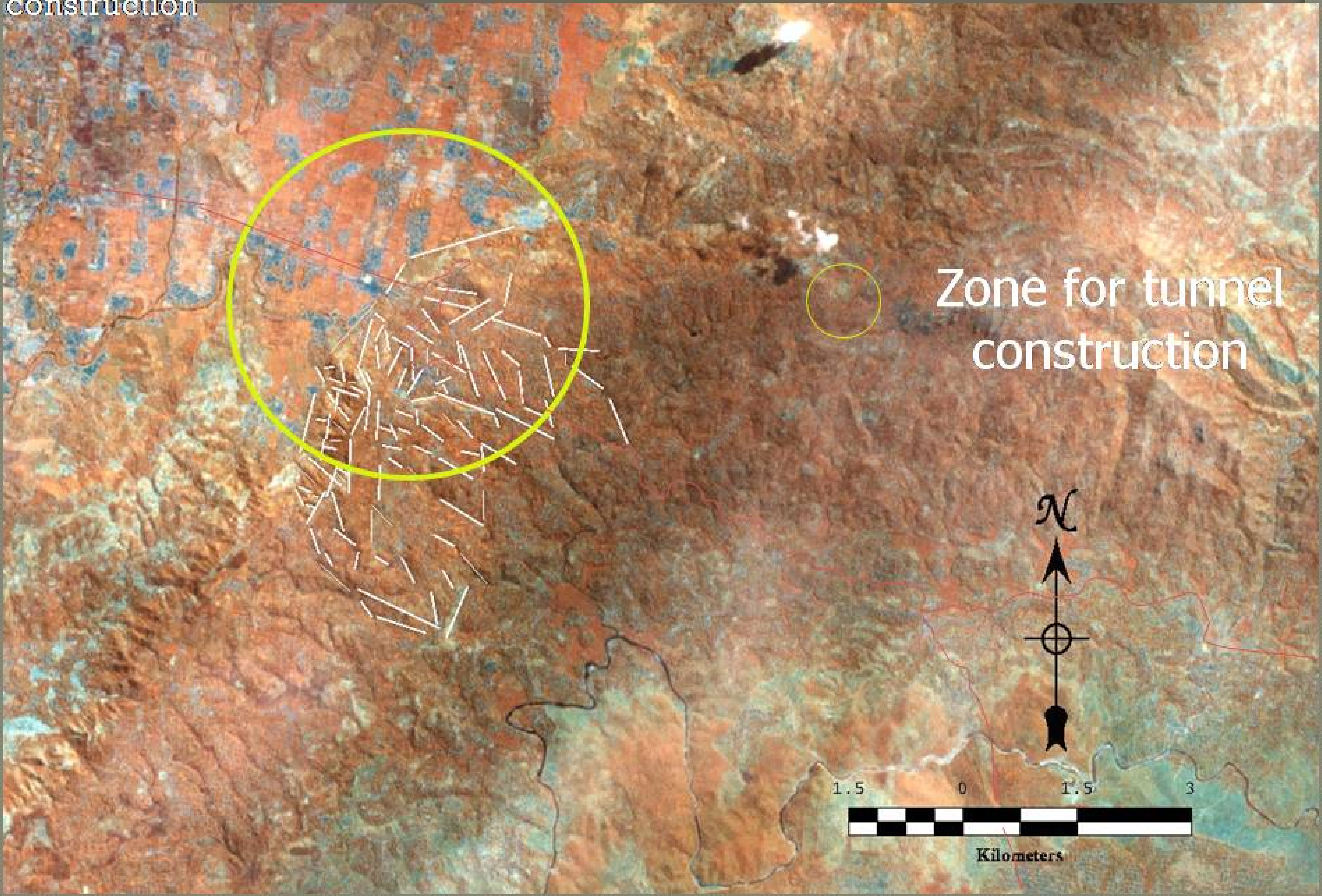
The remains of the town of Longarone after the flood caused by the overtopping of the Vajont dam as a result of the Mount Toc failure. More than 2000 persons were killed in this flood.

Remains of the Malpasset Dam as seen today. (kill 450 people in 1959) Photograph by Mark Diederichs, 2003

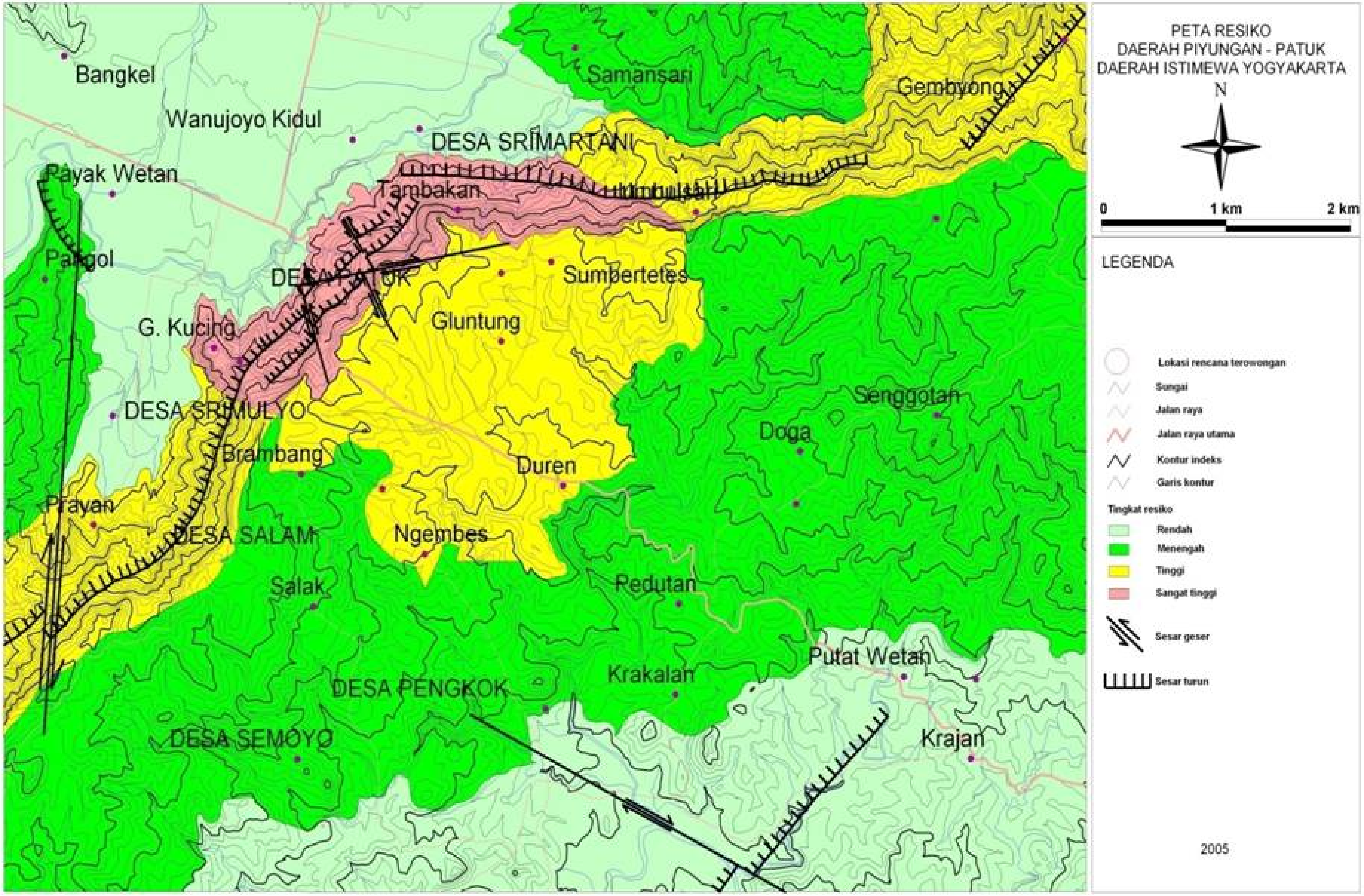


5000
7500
10000
12500
C'
A'
B'
C
B
A
G. DAHU 3
G. DAHU
Pr. PANENJOAN
G. ASTANA

Risk assessment and feasibility study to guarantee the safety of construction



Risk Map with respect to geology



TUJUAN PERKULIAHAN

- Mampu membedakan beberapa istilah :
  - Geologi
  - Teknik Geologi
  - Geologi Teknik/Geologi Rekayasa
- Mempelajari masalah batuan dan tanah secara mendalam, untuk keperluan design konstruksi.
- Mampu mempertimbangkan aspek-aspek geologi dalam perancangan konstruksi teknik sipil.

MATERI SAMPAI MID TEST

1. Pendahuluan
2. Genesa Batuan (bag 1)
3. Genesa Batuan (bag 2)
4. Deformasi Kerak Bumi
5. Klasifikasi Massa Batuan
6. Penyelidikan Tanah dan Batuan
7. Quiz